

## ABSTRACT

A measuring device on at least one rail of a railway track for measuring the roundness of an individual railway vehicle wheel during running thereof on the rail as a difference of the circumferential radius of the wheel flange top and the radius of the running tread of the railway vehicle wheel in a measuring plane can include a plurality of measuring sensors. The plurality of measuring sensors can have a lateral distance from one another and are connected to the rail in the measuring plane along the axis of rotation of the railway vehicle wheel or the set of wheels and perpendicularly to the contact surface of the respective railway vehicle wheel.